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ABSTRACT

The financial condition of traditionally black graduate schools is analyzed based on data from the report, "Maximizing Productivity in Thirty-Two Black Graduate Schools," prepared with federal support. In addition to the financial analysis, information is presented about the schools' history, purpose, mission, goals, students, faculty, programs, and plans. The following six financial health variables are discussed: views of graduate deans, faculty salaries, fellowships and assistantships, libraries, research and development, and revenues/expenditures. Summary data support the view that there is an apparent contradiction between the publicly-stated policy of increasing the number of minorities in graduate and professional education and the low level of funding at the institutions where large percentages of minorities are studying. Appendices provide: a list of black graduate schools; data on faculty salaries, race, educational background by degree obtained; student financial aid data, library expenditure data; and total revenues/expenditures data. (SW)

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This paper was presented at the Nineteenth Annual Forum of the Association for Institutional Research held at the Town and Country Inn in San Diego, California, May 13-17, 1979. This paper was reviewed by the AIR Forum Publications Committee and was judged to be of high quality and of interest to others concerned with the research of higher education. It has therefore been selected to be included in the ERIC collection of Forum papers.

Mary Corcoran
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THE FINANCIAL HEALTH OF THE TRADITIONALLY BLACK GRADUATE SCHOOLS

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For: The A.I.R. Forum
San Diego
May, 1979

Most of the data presented in this paper was developed from work done in producing the report: Maximizing Productivity in Thirty-Two Black Graduate Schools. The report was prepared for the United States Office of Education, under contract number 300770396. Sister Jean M. Lynch, wrote the initial proposal, under the aupices of the Conference of Black Graduate Schools. Mr. J. Steven Welsh provided data analytical, statistical, and computer application services to the project.

INTRODUCTION

The Conference of Deans of Black Graduate Schools represents the graduate schools which are found in the historically black colleges and universities. From its beginnings the Conference recognized the need for a strong data base which would reflect both the productivity and the problems of black graduate schools. The data base, by affecting a consciousness raising regarding the schools and by identifying needs, would help to overcome what Dr. John R. Hill of the Office of Advancement of Public Negro Colleges has called "the long period of invisibility and financial deprivation." However, except for the recent fact book on the Black Graduate Schools,[1] and a history of the 32 schools,[2] currently under preparation, collections of information on the Black Graduate Schools have been neglible until quite recently.[3]

The purpose of Maximizing Productivity ... was to provide data on which to base decisions and analyses so that the capabilities of these 32 schools can be utilized productively. In addition to the financial information that was adapted for use here, the report provides a comprehensive compilation of information about the schools' history, purpose, mission, goals, students, faculty, programs, and plans. The assembled data base was then used to make projections and recommendations.

The bulk of the information for both the report and this paper was from unpublished material that was made available to the researchers by the U.S. Office of Education: the Office of Planning, Budgeting, and Evaluation; the National Center for Educational Statistics; and the Learning Resources Branch of the Division of Multilevel Education Statistics. The Office of Civil Rights, the Bureau of the Census, and the Department of Labor were also generous in sharing information pertinent to the study. (At the time of the

study, 1976 was the latest year for which relatively complete financial data was available, even in unpublished form.)

In addition, the Deans or high administrators of all 32 of the black graduate schools were interviewed. Thrity written interrogatories were also returned and twenty-one of these provided additional financial data.

GENERAL BACKGROUND

The 32 Black Graduate Schools are listed in Appendix A. At present the 32 black institutions are educating significant percentages of blacks at the graduate and professional levels whether: (1) the nation, (2) a sample of the 21 states and the District of Columbia, that have black institutions or (3) the South Region is considered. Looking at the Fall 1976, figures for the South Region, where percentages are highest, more than 50% of the Blacks engaged in graduate or professional study, except for those in the areas of Business (43%) and Engineering (14%), were studying at black schools.

Although the literature reveals few studies of black graduate schools, they are not a recent phenomena in America higher education. Howard University awarded its first masters degree in 1872 and Fisk University was offering graduate study before 1900. By the end of the 30 year period of 1929-59, 22 of the 32 schools were operating.

By 1976 the 32 black graduate schools were offering

35 doctoral programs

330 non-education masters level programs

177 education masters level programs.

Besides the doctoral and masters level programs the 32 institutions have several professional schools and programs, including[4]:

2 Schools of Denistry,

4 Schools of Law,

2 Schools of Medicine,

4 Schools of Nursing and 2 additional schools offering master programs for nurses,

4 Schools of Pharmacy and 2 additional programs offering the doctorate in Pharmacology,

1 School of Theology, and

1 School of Veterinary Medicine.

When graduate education for minorities is addressed in terms of full time enrollment the resulting statistics work to cover over the accomplishments of the 32 schools in increasing the number of minorities in graduate and professional study and in meeting the needs of the greater number of blacks qualified for graduate study. Given the low level of financial aid available at the black institutions for graduate and professional study, and given the economic level of the average black student at the time of the baccalaureate degree, coupled with the opportunity for profitable employment for the first time, it is not surprising that most students choose part time graduate study and full time employment as the solution for the dilemma of further education and remuneration for the family investment.

Similarly, addressing graduate study for minorities in terms of doctoral study tends to overlook the productivity and potential of graduate schools with master programs only. The immediate transition from undergraduate study to full time doctoral study, or receiving the master and doctoral degrees at the same institution, does not appear to be the norm. Examination of 100 catalogs of institutions of higher education reveals that many terminal degreed faculty members received the master degree at a different institution

than the doctorate. Examination of the catalogs of 27 of the 32 institutions in this study revealed that over 1,000 faculty members with the doctorate or engaged in pursuing it had received the master degree at one of the Black Graduate Schools.

Of the ETS Black Graduate Availability Pool, Spring, 1974, 68.1 percent (1540) had the master degree as an immediate objective and 31.2 percent the doctorate. However, 72.5 percent (1639) of the pool had the doctorate degree as a long range objective.[5] Several factors operate in the high percentages for the immediate and long range objectives but it is evident that, for most minority persons, the master degree is more realistic as an immediate objective and the doctorate as long range.

In the context of full and part time enrollment in master and doctoral programs Black Graduate Schools continue to provide professional and graduate programs for minorities despite the low level of funding at these levels. Stereotyping continues to reflect an image of the schools offering programs almost exclusively in the field of education but enrollment data show them to be outstanding in their efforts to increase the number of minorities in a variety of professions and academic disciplines.

Historically, the Black Graduate Schools have shared the success and struggles of the parent institutions. With them they have shaped and been shaped by the social and educational history of the nineteenth and twentieth centuries. Individually, the schools may differ from one another in type of parent institution or in curricular offerings but, as a group, they share common characteristics. These characteristics developed as a response to the social history of a not too distant past. Today these characteristics distinguish the schools as examplars of the American belief in equalitarianism in its application to graduate and professional

education.

At the same time the schools struggle with other characteristics which they inherit from the limits imposed upon them by a segregated and, in the case in point, nonequalitarian society.

The two clusters of characteristics are the source of the productivity and of the problems of the schools.

VARIABLES/DATA ON FINANCIAL HEALTH

The ability of the Black Graduate Schools to offer quality graduate programs is directly related to the fiscal state of the parent institutions and to indications of their future financial stability. From the variety of financial health variables available for discussion, six were chosen as most relevant to the discussion of the financial health of the schools. The six are the Views of the Graduate Deans, Faculty Salaries, Fellowships and Assistantships, Libraries, Research and Development, and Revenues/Expenditures.

The Views of the Graduate Deans

The Deans of the 32 Black Graduate Schools were each asked to list 3 contributing and 3 inhibiting factors to the advancement of quality graduate programs at their individual institutions. Thirty deans replied.

The Deans' responses fell into four general areas: students, faculty, programs, and the institution/graduate school. The total responses were:

Category	Contributing Factors	Inhibiting Factors
Students	19	35
Faculty	35	14
Programs	21	8
Institution/ Graduate School	27	31

In all four areas, financial considerations dominated the lists of inhibiting factors. Only two of the 35 student inhibiters were nonfinancial. (General financial support, lack of fellowships, no funding for recruitment, and inadequate support facilities were all mentioned.) In the area of faculty, low salaries and lack of funded release time were mentioned. In the program area a lack of program funding was cited. In the institution area twenty one of 31 factors were rooted in inadequate funding.

Faculty Salaries

Obviously, the quality of any graduate school is closely linked to the quality of its faculty and salary is a key variable in attracting and retaining good faculty. Salary data on the Black Graduate Schools is included in Appendix B.

Information on the race, sex, and degrees of the graduate faculties is also included in Appendix B. Insofar as the composition of the faculty contributes to the multicultural environment, the black parent institutions and the black graduate schools are apparently fulfilling one of their goals. The tables indicate that overall, 82.18% of the graduate faculty have doctorates, and 2.16% have professional degrees. Twenty of the 29 schools have 80 percent or more of their faculty with doctorates or professional degrees.

Appendix B lists the salaries of faculty members at 31 of the 32 black institutions. The national average salaries are $17,524 for a 9 months contract and $21,000 for an 11/12 months contract. Within the 31 institutions at least 72.42 percent of faculty salaries on the 9 months contract and at least 58.96 percent on the 11/12 months contract fall below the national average. An attempt was made to compare the national average salaries

according to rank with the average salaries in the 32 institutions. Data on salary according to rank were available for 29 of the 32 institutions. Problems of missing data and privacy prevent strictly accurate figures but they do not distort the general overview of the differential of national salaries and salaries in the 29 black institutions.

The Appendix shows: (1.) A significant difference in salaries in the ranks of professor and instructor with a smaller difference in the rank of associate professor; (2.) A difference of almost $3,000 in the average salary— all ranks; and (3.) Within each rank a wide range of salary among the 29 institutions.

It is evident that an area of need in the 29 institutions is salary increases the ranks of professor, associate professor, and instructor. In the rank of assistant professor, where the salary difference is less than $1,000, only 8 of the institutions are in the fiftieth percentile or above.

Fellowships and Assistantships

In 1977 the median age of the white male recipient of the PHD was 31.6 years; of the black male recipient, 35.9 years. Although the years of registered time (BA-PHD) were shorter for blacks (5.9) than for whites (6.1), it took the black recipient 11.9 years in total time lapse as compared with 8.7 years for his white male counterpart. Support for graduate study leaves blacks in a position of disadvantage and helps to explain the difference in total time lapse between whites and blacks.

In 1977 whites received 48.7 percent and 33.9 percent of their support for graduate study from teaching fellowships and from research assistantships. Blacks received 25.9 percent and 15.0 percent of their support from the same sources. Blacks received higher percents of their support from the G.I. Bill, National Direct Student Loans, and other loans than whites and nonblack

minorities.[6]

Most sources of data on scholarships and fellowships do not differentiate between undergraduate and graduate/professional aid. The deans of the 32 black graduate schools provided data which pertains to graduate students only.[7] Appendix C provides information on financial aid for graduate students at 18 schools.

Although the black institutions still suffer from the period of financial deprivation, they provided in 1975 more fellowship aid to graduate students then the states and federal government combined. Thirteen of the 18 institutions provided institutional fellowships and assistantships. Less than half of the 18 schools received federal fellowships and only 2 states provided 2 schools with graduate fellowship/assistantship aid. Nine schools utilized work study but only 2 schools to any degree. Seven of the schools provided loans and 5 schools had private grants for graduate students. As has been noted, 3 of the schools reported no financial aid for graduate students. If the 23 schools represent the status of financial aid for the graduate students at the 32 institutions, or if the 23 schools are a sample of the 32 schools, then the concerns of the deans, above, are justified.

Libraries

The 32 institutions place priority on library improvement as shown in the library expenditures, below. However, the libraries in black institutions continue to be underfunded if their needs are considered. If the three highest library expenditures — $2,921,091 for Florida A&M University, $2,593,677 for Howard University, and $1,011,358 for Federal City College -- are subtracted from the total expenditures for libraries in all the institutions, a more accurate picture of library expenditures in the remaining

institutions is obtained.

Private		Public	
$4,739,564	(7 IHE)	$15,494,515	(25 IHE)
-2,593,677	(1 IHE)	- 3,932,449	(2 IHE)
$2,145,887	(6 IHE)	$11,562,066	(23 IHE)

Appendix D lists individual institutional library expenditures by the 32 institutions. Seventeen of the 32 schools rank above the fiftieth percentile nationally in library expenditures and the remaining schools are between the twenty-fifth and fiftieth percentiles. However other data[8], not reproduced here, indicates that many of the schools are below the twenty-fifth percentile nationally in library holdings. The data seem to indicate that much more funding, other than institutional expenditures, is needed to make up for past deprivation.

The federal government for Howard, the District of Columbia for Federal City, and the state of Florida for Florida A&M University are making efforts to improve the libraries of the 3 institutions. They are to be congratulated and taken as models for the other states and governments.

Research and Development

Like studies on fellowships and assistantships, studies of research and development do not separate undergraduate from graduate and professional schools. Data on institutional research and development are available. The presumption is that some of the money goes directly to graduate departments or, at least, affects them indirectly. According to the HEGIS financial report, the 6 private black institutions spent $2,784,128 on research and with Howard University, the seventh private institution, $22,070,702.[9] The 25 public institutions spent $16,832,359 making a total of $38,903,061 spent by 32 institutions on research in 1976-77. The federal government's share

represents 55 percent of the total.

Additional data on expenditures for scientific activities is presented here.[10] In the list of the top 200 institutions which received a total of $2,427,693,000 R&D funds from the federal government in 1976 only 2 black institutions, Florida A&M and Howard University, are included. Howard received $2,768,000.[11] The federal money given to the top 11 institutions in 1976 for scientific R&D expenditures would more than cover the entire operating budgets of the 32 institutions for that year. In a separate table for master granting universities seven of the black institutions are included in these ranks: Nos. 2, 4, 8, 11, 21, 22, 39 out of 50 institutions.[12] In yet another table, 6 of the black institutions rank Nos. 1, 11, 12, 31, and 35.[13] State funds for research went to 3 universities in Virginia, none of which was black. The state of North Carolina gave $15,527,000 to 2 of its universities, neither of which is black. Florida is the only state which gave R&D funds to a black college (Florida A&M) the sum of $380,000.[14]

On the federal level the United States Department of Agriculture ranks first in 1976 in awarding R&D monies to 13 of the 32 black institutions.[15] The total amount of federal R&D funds was $21,373,000. The black land grant colleges account for most of the funding from USDA. Without the funding from this agency, the federal R&D funds to the black institutions would be cut in half.

Revenues/Expenditures

There is no presently established set of variables to precisely define the financial health of institutions of higher education. An attempt was made in the study to isolate fiscal data which might provide some initial hypotheses

regarding the fiscal health of the 32 institutions. In this section the financial resources and needs of the 7 private and 25 public black institutions are organized around a set of questions: 6 questions on revenues; 6 questions on expenditures; and 3 questions on profit and loss. (Appendix E contains the questions and Appendix F lists some of the summarized answers for the areas of revenues and expenditures.)

From the data it can be observed that as a group the private schools overall operated at a loss, and both groups (public and profit) suffered overall losses in auxiliary enterprises. This is particular critical for the private institutions as the $2,881,055 loss on auxiliary enterprises accounts for more than half the overall deficit. As cited above library expenditures for the 32 institutions are notably increased when expenditures for Howard University, Federal City College, and Florida A&M University are added.

As a first step in establishing a set of yardsticks for measing institutional financial health, experts in university fiscal affairs were asked to suggest variables that they deemed most relevant to institutional financial health. A list of these variables is included as Appendix G.

Once this variable set was established, the financial data for all 32 schools was tabulated, using the National Center For Educational Statistics (NCES) form 2300-4 (Financial Characteristics of Institutions of Higher Education for Fiscal Year ending 1977), for each school.

At present work continues on both the variable set and its analysis. In particular, various multivariate analysis techniques are being used as part of the analysis. The results of two preliminary factor analyses are presented as Appendix H. (The factor analyses were done using programs from

the BMD statistical package.)

Achieving maximum usefulness from these techniques and confidence in their results generally involves a series of computer runs, punctuated by periods of contemplation and adjustment. In the case of these preliminary results, many of the analysis choices were made arbitrarily. The situation was further complicated by the caution that is always necessary when working with a small number of subjects--32 institutions. Also, the financial data was used as available and despite the fact that it contained interdependencies and redundancies. The additional studies now underway have already started to suggest some modifications of the initial interpretations, below.

Despite all these qualifications, the researchers continue to believe that factor analysis and other multivariate techniques hold much promise for facilitating an increased understanding of the financial condition of these institutions and, as cited above, various types of analyses are proceeding.

The initial results in Appendix H suggest several interesting relationships, the possibilities multivariate analysis offers, and some guarded preliminary observations. A wealth of information remains both in the printouts already generated and in what is still being discovered by subsequent analysis. These initial results, besides being used to simplify and direct future work, are of some interest per se. For example, the initial factor analyses strongly suggest that different sets of variables or different factors account for the differences among public and private institutions. (The naming and interpretation of the factors at this point are mainly creative suggestions, included for principally illustrative purposes and to suggest some of the possibilities for further analysis.)

Initial results for the public institutions suggest a series of money

flow factors. Factor one (1) loaded positively on revenue from government grants, research expenditures, and the proportion of interest and payments expended versus physical plant value owed. The factor loaded negatively with respect to state appropriation income variables. This suggests, for example, that those schools that get low state appropriations get government grants to do research or that those schools that get high state appropriations do not get government grants or, most likely, that those institutions which have a lot of government research grants get low state appropriations. Because of missing data, interpretation of some physical plant expenditures for public institutions is suspect.

Each of the other four factors for public schools also seems to be a money flow factor and is subject to a similar preliminary interpretation. Factor 4, for example, suggests that net auxiliary enterprise and overall operating profits vary as do the proportion of federal appropriations revenues.

Many variables--including those involving private grants, instructional and library expenses, and the value of the physical plant--do not have a high loading on any of the five factors for public institutions.

The private school factors are different from the public school factors. Factor 1 appears to be a size factor loading positively on federal appropriations, research expenditures, state appropriations, physical plant size, total revenues, library expenditures, and expenditures on scholarships and fellowships. The factor has a negative loading on the proportion of private grant income.

The other three factors and their largest positive and negative loadings:

Factor 2: Money Flow

+	-
Tuition/Fees Revenue	Government Grants
Expenditures on Scholarships/Fellowships	Expenditures on Instruction Support
	Net on Auxiliary Services

Factor 3: Financial Condition

+	-
	State Appropriations
	Public Service Expenditures
	Percent Physical Plant Owned
	Payments on Plant

Factor 4: Financial Change

+	-
Payments on Balance owed (on Physical Plant)	

Factor 2 seems to suggest that those private schools that receive a large part of their income from tuition/fees also expend a large part of their money on scholarships/fellowships and expend a lesser proportion of their money on instruction and academic support. These schools tend to get proportionally low income from government grants and take a loss of auxiliary services. Those schools that get a low percentage of their revenues from tuition spend relatively low on scholarships/fellowships and relatively high on instruction and academic support. These institutions get a proportionately high amount of government grants and make a profit from their auxiliary services.

What we know about some institutions and the factor scores for factor 2 Tuskegee (-.47524), Howard (.17490), Atlanta (-.02407), Xavier (1.04517), Fisck (.78324), Meharry (-1.95743), and Hampton (.45343)--tend to support this interpretation.

An initial cluster analysis on the private institutions suggests three groups of institutions. Further analysis via discriminant techniques will confirm or fail to confirm the significance of these groupings. The net profit from auxiliary enterprises, the proportions of income from private grants and endowment, and the overall net operating profit provide the principal differences between clusters.

The three clusters:

I Tuskegee, Howard, Xavier

II Meharry

III Atlanta, Fisk, Hampton

It was hoped that cluster analysis would readily reveal a small number of relatively homogeneous public institution clusters. However, the preliminary cluster analyses on these institutions suggest at least ten clusters. This would seem to indicate that using financial variables to categorize groups of institutions may prove to be a complex task.

Initial attempts to force the institutions into a smaller number of clusters were not successful and most of the clusters are populated by only one school. As yet there is no encouragement that the ongoing work in the area of cluster analysis will be any more successful.

CONCLUDING REMARKS

The data summarized in this paper, support the view that there is an apparent contradiction between the publically stated policy of increasing the

number of minorities in graduate and professional education and the low level of funding at the institutions where large percents of minorities are studying.

Concern over the few minorities in graduate and professional education remains justified. In 1977 Black Americans received only 3.5 percent of the doctorates awarded by American universities.[16] Since 1973, when the National Research Council began publishing reports on doctoral recipients according to ethnic origin, the percent of doctorates earned by Black Americans has not passed 4 percent. Total medical school enrollment and first year medical school enrollment increased from 1974 to 1976. During the same period the black enrollments in both categories decreased.[17]

There is a consciousness regarding the position of the black parent institutions in a segregated society but little awareness of the plight of the graduate school in the same context. There is, consequently, small appreciation of their productivity and less understanding of their needs. The black graduate schools began, for the most part, in a context of imposed handicaps and at a time when institutional resources, financial aid for graduate students, and permission and support for new programs were dependent upon state boards committed to preserving the dual educational system with its inequities. The report concludes that the effects of this context remain today and that nowhere are they more obvious than in funding of graduate and professional students and programs at the black institutions.

The initial proposal, "Maximizing Productivity in 32 Historically Black Graduate Schools," was submitted to Commissioner Boyer with the anticipation that the study would both provide evidence as to the significant contributions of the black institutions in the graduate and professional education of minorities and suggest ways by which the productivity of the schools could be

utilized in the national advantage to increase the number of minorities at these levels. At the same time the Conference of Deans of Black Graduate Schools expressed apprehension over the low funding of graduate and professional students at their institutions, of institutional aid for master and doctoral programs, and of research and development at the graduate and professional levels in the black institutions. The findings of the study prove that both the anticipation of the proposal and the apprehension of the deans were accurate.

FOOTNOTES

Footnotes

1. Oscar Allan Rogers, Jr. Profiles of Thirty-Two Historically Black Graduate Schools: A Report of the Office of Education. Washington, D.C.: DHEW, U.S. Office of Education, 1976.

2. Dr. Henry Cobb of Southern University has been funded by the Rockefeller Foundation to write a history of the Black Graduate Schools.

3. Several recent publications contain references or sections on the Black Graduate Schools. See: James E. Blackwell. The Participation of Blacks in Graduate and Professional Schools: An Assessment. Atlanta: Southern Education Foundation, 1977, pp. 35-41, and Henry E. Cobb, ed., comp., "Mission, Status, Problems, and Priorities of Black Graduate Schools," in Minority Group Participation in Graduate Education, a report of the National Board on Graduate Education. Washington, D.C.: National Academy of Sciences, 1976, pp. 191-217.

4. This paper refers to the professional schools only for enrollments in the professions of Dentistry, Law, Medicine, and Veterinary Medicine.

5. Educational Testing Service. "(1975) Minority Graduate Student Locator Service" (unpublished data), found in Equal Educational Opportunity for Blacks in U.S. Higher Education: An Assessment. Institute for Study of Educational Policy, Howard University. Washington, D.C.: Howard University Press, 1976, p. 281.

6. National Research Council Commission on Human Resources. Summary Report 1977 Doctorate Recipients from United States Universities. Washington, D.C.: National Academy of Sciences, February, 1978, pp. 28, 29.

7. Twenty-nine of the forms were returned. Twenty-three of them provided data on the financial aid section. Of these 2 forms marked $0. by each item; 2 forms marked "Not Available," and one form had written on it, "We receive absolutely no financial aid for graduate students." Six forms left the financial aid section empty. It is not known whether the information was not available or whether there was no financial aid.

"cont" Footnotes

8. HEGIS Report - LIBGIS Report, "College and University Libraries, Fall 1976", unpublished data.

9. HEGIS XII: "Financial Statistics of Institutions of Higher Education for Fiscal Year Ending 1977," unpublished data.

10. Source: Detailed Statistical Tables Appendixes B and C: Expenditures for Scientific Activities at Univeristies and Colleges Fiscal Year 1976, NSF 77-316. Washington, D.C.: National Science Foundation, 1977.

11. Ibid., p. 19.

12. Ibid., p. 22.

13. Ibid., p. 23.

14. Ibid., p. 23-27.

15. Source: National Science Foundation, "Federal Obligations to Black Universities and Colleges, by Agency and Type of Activity, Fiscal Year, 1976."

16. National Research Council Commission on Human Resources. Op. cit., p. 28

17. Bernard C. Watson, "Education," in State of Black America: 1978 by Bernard E. Anderson, James R. Dumpson, Charles Hamilton, et al. New York: National Urban League, 1978, pp. 41-82.

APPENDICES

The 32 Black Graduate Schools are located in 14 states and in the District of Columbia. Thirty of the schools are located in the South, one in Missouri, and one in Pennsylvania. Nineteen of the schools are in the "Adams" States. Twelve of the publicly controlled institutions have Land Grant status and Tuskegee Institute is funded for Cooperative Extension Services.

ALABAMA
- Alabama A&M University (LG)
- Alabama State University
- Tuskegee Institute (Pr)

DISTRICT OF COLUMBIA
- Federal City College (LG)
- Howard University (Pr)

*FLORIDA
- Florida A&M University (LG)

*GEORGIA
- Atlanta University (Pr)
- Fort Valley State College (LG)
- Savannah State College

KENTUCKY
- Kentucky State University (LG)

*LOUISIANA
- Grambling State University
- Southern University (LG)
- Xavier University (Pr)

*MARYLAND
- Bowie State College
- Coppin State College
- Morgan State University

*MISSISSIPPI
- Alcorn A&M University (LG)
- Jackson State University
- Mississippi Valley State University

MISSOURI
- Lincoln University (LG)

*NORTH CAROLINA
- North Carolina A&T University (LG)
- North Carolina Central University

*PENNSYLVANIA
- Cheyney State College

SOUTH CAROLINA
- South Carolina State College (LG)

TENNESSEE
- Fisk University (Pr)
- Meharry Medical College (Pr)
- Tennessee State University (LG)

TEXAS
- Prairie View A&M (LG) University
- Texas Southern University

*VIRGINIA
- Hampton Institute (Pr)
- Norfolk State College
- Virginia State College

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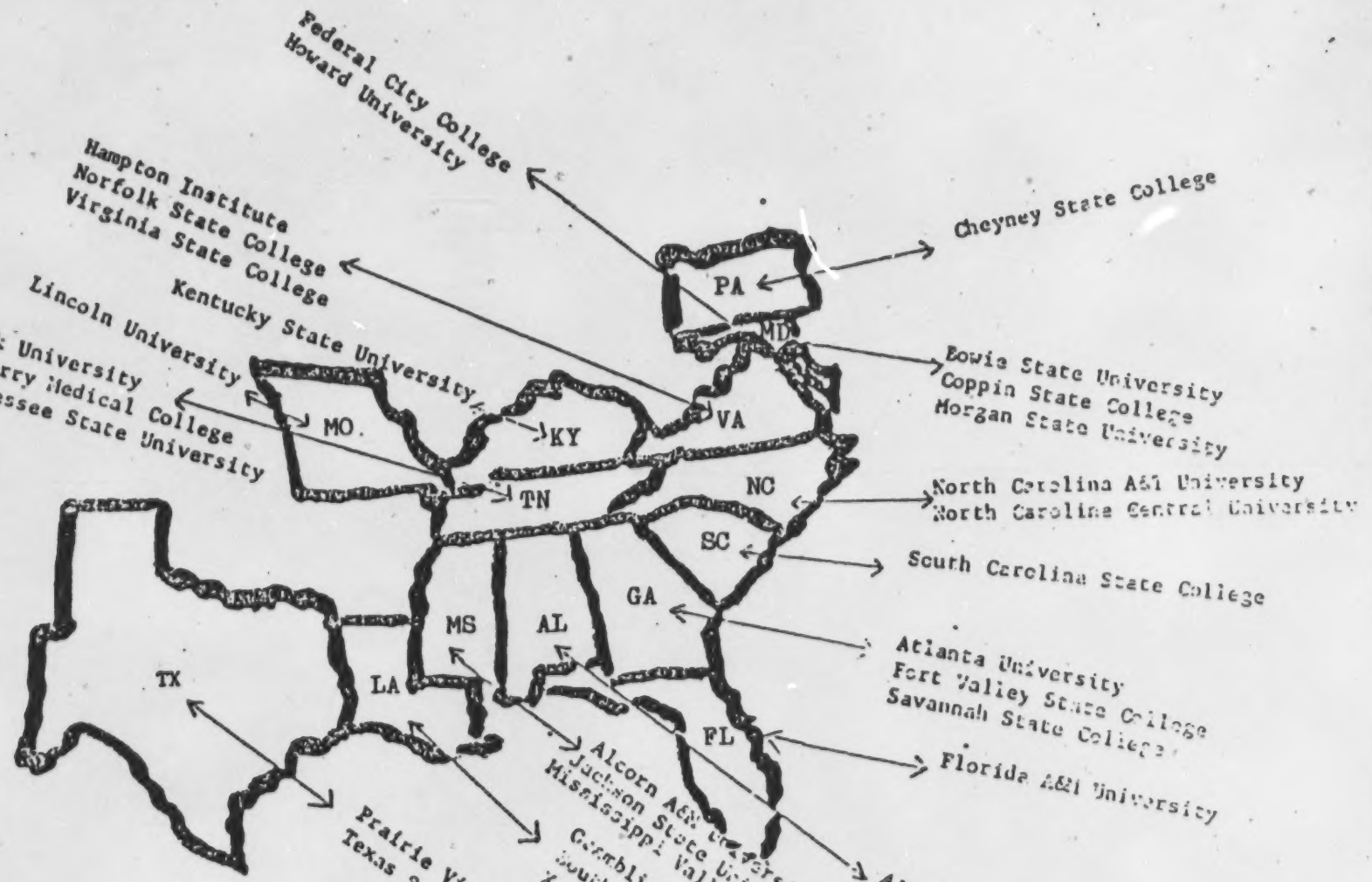
* "Adams" State
(Pr) Private Institution
(LG) Land Grant Institution

GEOGRAPHICAL LOCATION OF SCHOOLS BY STATES



Taken from
Profiles of Thirty-Two
Historically Black Graduate Schools;
A Report of the Office of Education,
by Oscar Allan Rogers, Jr. Washington, D.C.:
USOE, HEW, 1976.

A-2

Salaries of Faculty Members at 31 Black Institutions, Fall, 1976.*

	9 Mos. Contract		12 Mos. Contract	
Salary Range	No. of Faculty	Percent	No. of Faculty	Percent
Below $ 7500	95	1.56	25	1.59
$ 7500-$ 9999	532	8.72	45	2.86
$10000-$12999	1921	31.48	221	14.06
$13000-$15999	1871	30.66	325	20.67
$16000-$18999	1054	17.27	311	19.78
$19000-$24999	518	8.49	427	27.16
$25000-$29999	99	1.62	134	8.52
$30000	13	.21	84	5.34
Total	6103		1572	

*HEGIS Report on Faculty, Fall, 1976. EEOC Form 221 5/75.

National Average 9 mos. contract: $17,524
National Average 11/12 mos. contract: $21,000

National Averages and Mean Salaries of 29 Black Institutions According to Rank for 9 Months Contracts, 1976.

Rank	National Average		Mean--29 Black IHE	Difference
Professor	$23,773		$19,399	$4,374
		Range:	14,846-27,117	
Associate Professor	17,884		16,430	1,454
		Range:	13,277-19,973	
Assistant Professor	14,654		13,832	822
		Range:	10,272-16,110	
Instructor	14,745		11,548	3,197
		Range:	9,598-13,795	
Average All Ranks	17,524		14,776	2,745
		Range:	11,862-18,742	

Source: NCES OE Form 2300-3 3/76. The average salary in the 29 black IHE was arrived at by adding the total salary outlay for men and for women in each rank and dividing by the total number of men and women in the category. Salaries in one institution which has 11/12 months contracts only were adjusted to the equivalence of 9 months salary contracts.

Faculties of 31 Black Institutions of Higher Education According to Sex and Race, Fall, 1976. [1]

Race	Male	Female	Total	Percent
Black	2878	2163	5041	64.00
White	1416	816	2232	28.33
Hispanic	49	224	273	3.47
Asian	257	45	302	3.83
Amer. Indian	14	15	29	.37
Total	4614	3263	7877	100.00
White & Other Minorities	1736	1100	2836	36.00

Faculty Degree Status at 29 Black Graduate Schools

Degree	No. of Faculty	Percent of Faculty
Doctorate	1753	82.18
Masters	334	15.66
Professional	46*	2.16
Total	2133	100.00
Doctorate & Professional	1799	84.34

* Professional degrees are DVM, JD, DDS, and MD. Only the faculty teaching in the graduate schools are counted in the 46 professional degrees.

FINANCIAL AID FOR GRADUATE STUDENTS IN 18 BLACK GRADUATE SCHOOLS, 1976-77[1]

School	Fellowships, Assistantships: Institutional	State	Federal	Work Study	Other	Loans	Private	Total
1.	$ 50,000	0	$ 111,225	$ 25,213	$ 0	$ 1,100	$ 0	$ 187,538
2.	27,471	0	0	704	0	4,046	0	32,221
3.	1,982,841	0	0	0	50,173	216,000	NA	2,249,014
4.	0	0	141,600	350	288,000	0	1,000	430,950
5.	5,600	0	48,183	0	0	0	0	53,783
6.	0	0	100,642	7,816	0	59,000	0	167,458
7.	0	0	0	0	3,000[2]	1,600	0	4,600
8.	0	40,400	0	32,000	0	0	0	72,400
9.	106,358	0	0	0	0	0	0	106,358
10.	0	0	0	9,000	0	0	0	9,000
11.	19,000	0	0	0	0	0	0	19,000
12.	32,400	0	0	0	0	0	0	32,400
13.	9,000	54,000	261,000	27,000	0	NA	9,000	360,000
14.	26,000	0	0	86,650	0	36,000	4,000	153,250
15.	2,800	0	0	0	0	0	0	2,800
16.	50,000	0	0	0	0	0	0	50,000
17.	50,000	0	43,300	0	0	0	26,400	119,700
18.	250,000	125,000	16,000	200,000+	116,000	NA	2,000	709,000
TOTAL	$2,612,070	$219,400	$721,950	$388,733+	$457,173	$317,746	$42,400	$4,759,472

1. Eighteen schools had some type of financial aid for graduate students. Three schools marked $0.00 for each item; 2 schools marked NA. Six schools left the line items empty.

2. "Other than predominant race" Here for non-black students.

APPENDIX C

Institutional Library Expenditures for 32 Black IHE and Comparison with National Medians

Public

Universities[1] 5000-9999	Colleges/Graduate 5000-9999	Colleges/Graduate 1000/4999
$2,921,091	$761,850	$814,697
1,222,221 (NM)	527,999 (NM)	805,113
1,011,358	469,212	640,256
870,668		515,586
683,485		479,519
647,281		465,234
624,778		407,653
608,266		357,617
486,742		302,272 (NM)
405,512		301,799
		266,318
		265,867
		261,827
		242,452
		236,923
		180,425

Private

University 5000-9999	Colleges/Graduate 1000-4999	Colleges/Graduate 500-999
$2,593,677	$551,114	$160,776
	401,953	
1,233,000 (NM)	388,681	50,890 (NM)
	280,635	
	262,728	
	110,027 (NM)	

Source: HEGIS Report - LIBGIS Report, "College and University Libraries, Fall, 1976," unpublished data.

NM National Median

1. Numbers refer to student population.

Revenues

1. What percent of total revenues comes from tuition and fees?
2. What percent of total revenues comes from state appropriations?
3. What percent of total revenues comes from government grants and contracts?
4. What percent of total revenues comes from private gifts, grants, and contracts?
5. What percent of total revenues comes from auxiliary enterprises?
6. What percent of total revenues comes from endowment income?

Expenditures

7. What percent of total expenditures is spent on instruction?
8. What percent of total expenditures is spent on research?
9. What percent of total expenditures is spent on public service?
10. What percent of total expenditures is spent on libraries?
11. What percent of total expenditures is spent on total educational expenditures?
12. What percent of total expenditures is spent on auxiliary enterprises?

Profit, Loss, Indebtedness

13. What is the profit or loss on total revenues, total expenditures?
14. What is the profit or loss on auxiliary enterprises?
15. a. What are the assets on physical plant -- land, buildings, equiptment?

    b. What is the indebtedness, balance owed on principal, on physical plant -- land, buildings, equiptment?

PERCENT OF SELECTED LINE ITEMS TO TOTAL REVENUES AND TOTAL EXPENDITURES OF 6 BLACK PRIVATE IHE AND 24 BLACK PUBLIC IHE FOR 1976-77[1]

	Line Items	Revenues-6 Black Private IHE Amount	Percent	Revenues-24 Black Public IHE Amount	Percent
1.	Tuition & Fees	$19,615,789	21.80	$ 49,091,055	13.59
2.	State Appropriations	1,220,781	1.26	156,652,328	43.36
3.	Gov't.Grants,Contracts	27,187,502	30.21	74,563,341	20.64
4.	Private Gifts, Grants Contracts	12,724,954	14.14	3,864,586	1.07
5.	Endowment Income	3,556,150	3.95	63,675	.02
6.	Aux. Enterprises	8,790,622	9.77	54,487,914	14.80
7.	Total Revenues	$89,986,867		$361,301,357	

		Expenditures-6 Black Private IHE Amount	Percent	Expenditures-24 Black Public IHE Amount	Percent
1.	Instruction	$ 29,708,738	30.73	$118,648,734	33.95
2.	Research	2,784,128	2.88	16,562,059	4.74
3.	Public Service	2,909,458	3.01	9,853,411	2.82
4.	Libraries	2,145,887		11,562,066[2]	
5.	Total Educational	67,969,994	70.31	295,717,079	84.62
6.	Aux. Enterprises	9,981,238	10.32	53,814,003	15.40
7.	Total Expenditures	$96,676,162		$349,479,022	

1. Source: HEGIS Report, "Financial Statistics of IHE for Fiscal Year Ending 1977." (unpublished data) Howard and Federal City excluded.

2. Includes 23 IHE, not 24. See notes on "Libraries."

APPENDIX F

PERCENT OF SELECTED LINE ITEMS TO TOTAL REVENUES AND TOTAL EXPENDITURES OF 7 BLACK PRIVATE IHE AND 25 BLACK PUBLIC IHE FOR 1976-77[1]

	Line Items	Revenues-7 Black Private IHE Amount	Revenues-7 Black Private IHE Percent	Revenues-25 Black Public IHE Amount	Revenues-25 Black Public IHE Percent
1.	Tuition & Fees	$ 32,654,201	14.37	$ 50,150,206	12.95
2.	State Appropriations (also Fed. & Local)[2]	57,216,025	25.17	176,747,327	45.65
3.	Gov't. Grants, Contracts	45,081,676	19.83	78,511,834	20.28
4.	Private Grants, Gifts, Contracts	15,389,065	6.77	4,011,586	1.04
5.	Endowment Income	4,045,009	1.78	320,451	.08
6.	Aux. Enterprises	12,721,162	5.60	53,850,314	13.91
7.	Total Revenues	$227,302,142		$387,170,226	

		Expenditures-7 Black Private IHE Amount	Expenditures-7 Black Private IHE Percent	Expenditures-25 Black Public IHE Amount	Expenditures-25 Black Public IHE Percent
1.	Instruction	$ 64,980,700	28.00	$131,794,503	35.17
2.	Research	22,070,702	9.51	16,832,359	4.50
3.	Public Service	2,909,458	1.25	11,114,411	2.97
4.	Libraries	4,739,564	2.04	15,494,515	4.13
5.	Total Educational	157,073,930	67.67	320,595,993	85.56
6.	Aux. Enterprises	15,602,217	6.72	54,176,403	14.46
7.	Total Expenditures	$232,122,143		$374,720,336	

1. Source: HEGIS Report, "Financial Statistics of IHE for Fiscal Yr Ending 1977."
2. Includes Howard University and Federal City College which receive appropriations from the federal government and the District of Columbia.

F-2

Fiscal Variables.[1]

A1/A20-16	Tuition & Fees/Total Current Funds Revenues-Sales of Auxiliary Services
A2/A20-16	Federal Appropriations/do.
A3/A20-16	State Appropriations/do
A5-10/A20-16	Government Grants and Contracts/do
A5-12/A20-16	Government & Private Grants & Contracts/do
A11+12/A20-16	Private Gifts, Grants/do
A13+14/A20-16	Endowment Income/do
B1/B12	Instruction/Total Educational, General Expenditures
B2/B12	Research/do
B3/B12	Public Service/do
B1-4/B12	B1+2+3+Academic Support/do
B5/B12	Libraries/do
B9+10/B12	Scholarships and Fellowships/do
100-D4/C1+2+3	100-Balance on Principal (Physical Plant Indebtedness)/Physical Plant Assets
D5/D4	Interest Payments on Plant Indebtedness/Balance owed on Principal
D5/A20	Interest Payments/Total Current Funds Revenues
D3/D4	Payments Made on Principal During Year/Balance Owed on Principal
E7/E6	Endowment Yield/Value of Endowment End of Year
A16-B14	Revenues Auxiliary-Enterprises Expenditures Auxiliary Enterprises
A3/B1-4	State Allocations/Instruction + Research +Public Support + Academic Support
A3/B12	State Allocations/Total Education General Expenditures
A20-B19	Total Current Funds Revenues-Total Current Funds Expenditures

Fiscal Variables (Contd.)

C1+2+3	Land+Buildings+Equipment (Total 32 schools)
A20	Total Current Funds Revenues (Total 32 schools)
A3	State Appropriations (Total 32 schools)
B5	Libraries (Total 32 schools)
B9+10	Scholarships & Fellowships (Total 32 schools)

1. The letters at the left refer to line numbers on the NCES form 2300-4.

Factor Analysis--Public Schools

Variable	Factor Loadings				
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
A1/A20-16					-.71233
A2/A20-16				-.92435	
A3/A20-16	-.78787				
A5thru10/A20-16	.90514				
A5thru12/A20-16	.90251				
A11+12/A20-16					
A13+14/A20-16					.85516
B1/B12					
B2/B12	.77244				
B3/B12		.69595			
B1thru4/B12		.86279			
B5/B12					
B9+10/B12		-.74374			
100-(D4/C1+2+3)					
D5/D4	.61287				
D5/A20					
D3/D4	.62101				
E7/E6					
A16-B14				-.73520	
A3/B1thru4	-.69468				
A3/B12	-.84871				
A20-B19				-.63098	
C1+2+3					
A20			.81433		
A3			.6263		
B5					
B9+10		-.77765			
Factor variance:	6.24	3.33	3.12	2.88	2.27

Factors with variance less than 2.0 and variable loadings of less than .6 have been excluded.

The factor variances are approximate, because the BMD programs do not report variances after the factors are rotated. The reported factors were subjected to orthogonal rotation.

Factor Analysis--Private Schools

Variable	Factor Loadings Factor 1	Factor 2	Factor 3	Factor 4
A1/A20-16		.80503		
A2/A20-16	.95064			
A3/A20-16			-.82908	
A5thru10/A20-16		-.74253		
A5thru12/A20-16	-.86397			
A11+12/A20-16	-.78780			
A13+14/A20-16				
B1/B12		-.89773		
B2/B12	.96401			
B3/B12			-.91273	
B1thru4/B12		-.74289		
B5/B12				
B9+10/B12		.73741		
100-(D4/C1+2+3			-.74135	
D5/D4				
D5/A20			-.90709	
D3/D4				.97239
E7/E6		.92120		
A16-B14		-.81102		
A3/B1thru4	.98392			
A3/B12	.87979			
A20-B19				
C1+2+3	.96490			
A20	.99286			
A3	.98622			
B5	.96051			
B9+10	.83696			
Factor variance:	11.73	6.45	4.10	2.12

Factors with variance less than 2.0 and variable loadings of less than 0.7 were excluded.